## WHAT IS CLAIMED IS

5

20

30

35

1. A method for securely transmitting first information from a first location to a second location by way of a first channel, said method comprising the steps of:

at said first and second location, acquiring second and additional information which is independent of said first information;

time aligning said second and additional information at both said first and second locations;

at said first location, relating said first information with said second and additional information by means of a first function to thereby generate a transmitter signal for transmission;

transmitting said transmitter signal from said first location to said second location by way of a first signal channel;

at said second location, relating said transmitter signal to said second and additional information with a second function which is the reverse of said first function, to thereby recover said first information.

- 2. A method according to claim 1, wherein said first and second functions are XOR functions.
- 3. A method according to claim 1, wherein said step of acquiring said second and additional information at said second location includes the steps of receiving said second and additional information by way of individual, independent signal channels.

4. A method according to claim 1, wherein at least some of said second and additional information is transmitted from said first location to said second location.

**17** 

5. A method according to claim 4, wherein said step

of transmitting at least some of said second and additional information from said first location to said second location is performed by way of at least one signal channel independent of said first signal channel.

5

10

30

35

- 6. A method according to claim 4, wherein said step of transmitting at least some of said second and additional information from said first location to said second location is performed by transmitting each of said second and additional information by way of a single signal channel independent of said first signal channel for each individual one of said second and additional information.
- 7. A method according to claim 6, wherein said step of at said second location, relating said transmitter signal to said second and additional information with a second function is performed in concert with a receiver able to simultaneously receive multiple channels including said first signal channel, and said signal channels for each individual one of said second and additional information.
  - 8. A method for securely transmitting first and second information from a first location to a second location, said method comprising the steps of:
- processing said first information by means of at least said second information to thereby generate processed first information;

processing said second information by means of at least said first information to thereby generate processed second information;

transmitting said processed first and second information separately by way of independent first and second channels, respectively, to said second location; and

at said second location, reverse processing said processed first information by use of at least said processed

second information and reverse processing said processed second information by the use of at least said processed first information.

- 9. A method according to claim 8, wherein said step at said second location of reverse processing said processed first information by use of at least said processed second information includes the step of independently receiving said processed first information from said first independent channel and independently receiving said processed second information from said second independent channel.
- at said second location of reverse processing said processed

  first information and said processed second information

  includes the step of receiving said processed first information

  from said independent first channel and said processed second

  information from said independent second channel by means of an

  integrated circuit receiving arrangement.

20

25

30

35

11 A receiver for simultaneously recovering at least first information received in processed form by way of a first independent physical channel, where said first information transmitted over said first physical channel is processed in conjunction with second information, and said second information is transmitted to said receiver over a second independent channel, said receiver comprising:

means for receiving said processed first information from said first physical channel;

means for receiving said second information from said second independent channel; and

processing means for processing said first processed information in conjunction with said second information to extract said first information from said first processed information and said second information.

12. A receiver according to claim 11, wherein said second information transmitted over said second independent channel is processed before transmission by processing with said first information, and wherein said receiver comprises:

further processing means for processing said first processed information with said second information to extract information relating to the form of said second information before said processing with said first information.

10

25

3.0

35

5

- 13 A receiver according to claim 11, wherein said receiver lies within a single integrated circuit.
- 14. A receiver according to claim 12, wherein said receiver lies within a single integrated circuit.
  - 15. A method for securely transmitting first and second information streams from a first location to a second location, said method comprising the steps of:
- processing said first information stream by means of at least said second information stream to thereby generate processed first information stream;

processing said second information stream by means of at least said first information stream to thereby generate processed second information stream;

transmitting said processed first and second information streams separately by way of independent first and second channels, respectively, to said second location; and

at said second location, reverse processing said processed first information stream by use of at least said processed second information stream and reverse processing said processed second information stream by the use of at least said processed first information stream.

16. A method according to claim 15, wherein said

step at said second location of reverse processing said processed first information stream by use of at least said processed second information stream includes the step of independently receiving said processed first information stream from said first independent channel and independently receiving said processed second information stream from said second independent channel.

5

20

25

30

- 17. A method according to claim 15, wherein said

  step at said second location of reverse processing said

  processed first information stream and said processed second

  information stream includes the step of receiving said

  processed first information stream from said independent first

  channel and said processed second information stream from said

  independent second channel by means of an integrated circuit

  receiving arrangement.
  - 18. A method according to claim 15, further comprising a third information stream to be transmitted to said second location, and wherein:

said step of processing said first information stream by means of at least said second information stream to thereby generate processed first information stream includes the step of processing said first information stream by means of said second and third information streams;

said step of processing said second information stream by means of at least said first information stream to thereby generate processed second information stream includes the step of processing said second information stream by means of said first and third information streams; and further including the steps of:

processing said third information stream by means of at least said first and second information streams to produce a processed third information stream;

transmitting said processed third information stream

21

to said second location separately from said processed first and second information streams by way of a third channel independent from said first and second channels; and

at said second location, reverse processing said processed third information stream by use of at least said processed first and second information streams.

- 19. A method according to claim 18, wherein said step, at said second location, of reverse processing said
  10 processed first information stream by use of at least said processed second information stream and reverse processing said processed second information stream by the use of at least said processed first information stream, is performed by reverse processing said processed first information by use of at least said processed second and third information, and by reverse processing said processed second information by the use of at least said processed first and third information streams.
- 20. A receiver for simultaneously recovering at
  least a first information stream received in processed form by
  way of a first independent physical channel, where said first
  information stream transmitted over said first physical channel
  is processed in conjunction with at least a second information
  stream, and said second information stream is transmitted to
  25 said receiver over a second independent channel, said receiver
  comprising:

means for receiving said processed first information stream from said first physical channel;

means for receiving said second information stream from said second independent channel; and

processing means for processing said first processed information stream in conjunction with said second information stream to extract said first information stream from said first processed information and said second information stream.

30

5

21. A receiver according to claim 20, wherein said second information stream transmitted over said second independent channel is processed before transmission by processing with said first information stream, and wherein said receiver comprises:

further processing means for processing said first processed information stream with said second information stream to extract information relating to the form of said second information stream before said processing with said first information stream.

- 22. A receiver according to claim 20, wherein said receiver lies within a single integrated circuit.
- 23. A receiver according to claim 21, wherein said receiver lies within a single integrated circuit.
- 24. A method for transmitting a plurality of different information streams from a first location to a second20 location, said method comprising the steps of:

at said first location, processing each of at least a plurality, greater than three, of said information streams, by means of at least a plurality, greater than three, of other ones of said information streams, to thereby produce a plurality of processed information streams;

transmitting said plurality of processed information streams by way of independent channels from said first location to said second location;

at said second location, reverse processing each of
30 said plurality of said processed information streams by means
of other ones of said processed information streams, to thereby
recover at least some of said plurality of different
information streams.

25

5

10